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AUTHOR Fabien, Miriam Gannon
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ABSTRACT

Noting that a learning-styles approach to college instruction would ideally call for a separate course on learning taught by a learning styles specialist committed to building on students' strengths rather than concentrating on their weaknesses, this paper describes how these goals can be met in a basic composition course. The first half of the paper discusses a variety of ways teachers can help students become aware of their own learning styles, including learning style tests and inventories, discussions, questionnaires, and peer interviews. The second half of the paper explores ways to build on student strengths and help them acquire new learning strategies. This section focuses on the dimension of field dependence/independence, the most widely studied and best understood of the learning styles, and how the tendencies of these styles can be regarded as strengths in a composition class. Appendixes include student surveys and learning style questionnaires; further reviews of research into individual differences in learning styles, field dependence and independence, creativity, sensory-motor preference in learning, and learning styles in level-of-processing; and writing assignments focusing on learning style awareness, and alternate study skill suggestions for spelling, vocabulary, and answering essay questions. A nine-page bibliography concludes the document. (HTH)

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Suggestions for Identifying and Building on Learning Styles in Writing Classes

by

Miriam Gannon Fabien

1985

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CS 209 480

SUGGESTIONS FOR IDENTIFYING AND BUILDING ON LEARNING STYLES IN WRITING CLASSES

Introduction

In his book, The ABC's of Literacy: A Guidebook for Parents and Educators, Stephen Judy suggests that those planning any kind of an educational endeavor begin by visualizing the ideal situation, goals, and outcomes, and draw up what he calls Plan A -- the ideal. After working out this plan carefully, educators can go on to formulate Plan B -- the practical and possible -- and try to make it as close to the ideal as time, place, and situation permit.[1]

If a learning-styles approach to education were to be adopted at the college level, plan A would call for a separate course on learning taught by a learning styles specialist who was thoroughly committed to the idea of building on students' strengths rather than concentrating on their weaknesses. Such a course would be much in keeping with what Patricia Cross advocates

when she asserts that more attention should be paid to building on strengths rather than remediation.[2] This specialist would be the kind of teacher described by Stanford Ericksen who would accomplish the following goals:

1. present the challenge of learning as a major motivating influence in the academic lives of students;

2. like ideas and students more than "teaching;"

3. have a deep and pervasive identity with his or her discipline, and, finally;

4. share these qualities openly and generously with students.[3]

Students in such a class would be helped to discover how they generally approach the task of learning and would be encouraged to identify the strengths of this approach. They would consider how this style can be helpful to them in general, for specific disciplines, and for individual tasks. Students would learn to build on these strengths by doing a variety of assignments and completing projects especially designed for that purpose. Scientific inquiry, problem-solving, and practice in communicating ideas in the style of various disciplines would all have a place in this curriculum.

Such a learning-styles approach would 1) strengthen students' confidence in themselves as learners and 2) motivate them to want to know what they can do in situations where their styles are not the most suitable or effective ones. At this point, they would be ready to examine the shortcomings of particular styles for specific purposes and ready to consider other styles that might fit their needs. The remainder of the course would be devoted to developing these styles. Students would emerge from such a class armed with confidence, curiosity, and a repetoire of learning strategies that would enable them to approach any class or learning situation in the most effective and efficient manner possible given their individual talents and learning styles. They would be willing to assume responsibility for their own learning and would be prepared to work with teachers to maximize their investment in learning. Nor would they be content with merely learning that something is or was; instead they would be capable of using what they learned. To borrow Gilbert Ryle's terms, emphasis would be on "knowing how" rather than "knowing that."[4] True learning would occur as students began to think for themselves, noting

relationships, raising questions, and seeking to apply what they learned. At this point, they would be capable of, in Jerome Bruner's words, "crossing the barrier from learning to thinking."[5]

If we turn to plan B -- the practical and possible -- the same goals can be met in a composition class. How this can be accomplished is the focus of this article. Many ideas will be offered, some of which will seem more workable than others, depending on the needs, interests, and inclinations of individual teachers. Each reader will want to consider his or her students, objectives, and situation in evaluating the suggestions and thinking about implementing some of them. Finally, the results of one such attempt to use learning-styles information will be summarized.

The desired outcomes of a learning styles composition class and the kind of teacher required would remain the same as in the ideal situation. Reading and writing assignments can be related to the topic of learning either by using a text about learning or by designing materials for the class in question. Published texts that might readily be used are Foundations for Learning: Language 1 and Language 2,

Donald Smith's Learning to Learn, and "Teaching and Learning," chapter three of Marcia Stubbs and Sylvan Barnet's The Little-Brown Reader. Articles on the general concept of learning styles as well as on specific styles such as field dependence/independence, sensory-motor preference, and level-of-processing might also be used. Other topics would include reading for learning, creativity, and freewriting. Instructor written materials can be particularly appropriate if the class in question happens to be made up of non-traditional students or non-native speakers of English. A class of vocational students or one of older adults might also profit from specially targeted materials, as would a group which includes many students who read below grade level. If a designated composition text is used, it too can be adapted to incorporate learning styles information or to enable students to use it from a learning styles approach. For example, Lynn Quitman Troyka and Jerrold Nudelman's Steps in Composition, Third Edition, used in developmental writing classes at many community colleges, emphasizes learning to be one's own editor and provides a list of suggestions, some depending on auditory skills, others

requiring visual acuity. After each has been explained, students can be asked to try out the suggestions that seem most compatible with their learning style and write about the outcome. The same procedure can be employed with the hints about improving spelling and vocabulary as well. Students can be asked to try three suggestions for each type of endeavor and report their findings by writing paragraphs saying what they did, what happened, and what they have concluded about these approaches. In addition, four of the essays in Steps, although not actually about learning, suggest themselves as springboards for talking about learning. Harold Krent's "Darkness at Noon," an essay about being blind, is even illustrated with a picture of the Braille alphabet and its discussion section asks students to consider trying to learn to read through touch. Another essay, Max Shulman's "Love is a Fallacy," provides a humorous introduction to logic. In "Once Upon a Time -- a Fable of Student Power" experiential learning is presented as providing an alternate but valid form of learning that can provide benefits both to the students and the community.

Identifying Individual Styles

How, then, can a teacher help students become aware of their own styles while at the same time teaching a basic composition class? One answer is to use learning-styles tests and inventories. An embedded figures test, for example, can be used to identify field dependence/independence tendencies, and a matching figures test or questionnaire can measure conceptual tempo, or impulsiveness versus reflectivity. Kolb's "Learning Styles Inventory," one of several such instruments, can be used to ascertain tendencies to be convergent or divergent thinkers or to be assimilators or accommodators. Hill's "Cognitive Style Mapping," Dunn's "Learning Style Inventory," or the Psychology Corporation's "Survey of Study Habits and Attitudes" might be used to develop a general profile of each student.[6] Teacher designed inventories can also be utilized to stimulate thinking about individual preferences and practices. Once students' learning styles have been identified, Plan A -- the ideal -- can be implemented.

Another possibility that presents itself is a "discovery" approach that utilizes discussions,

observations, experiments, and writing assignments to help students identify their preferences and recognize their strengths as learners. Such an approach is very much in keeping with what both cognitive and developmental psychologists tell us about how intellectual and affective growth occur. Bruner, for example, asserts that instruction that leads a student to discover for himself will yield both motivation and confidence. Moreover, such instruction promotes true learning as it challenges students to think, observe, predict, question, compare, and analyze. In an interview in Psychology Today (1982), Bruner discusses MACOS, a social studies course he designed using discovery principles, and says that such programs "are more important than ever." Patricia Cross maintains that development is encouraged when an individual interacts with an appropriately stimulating environment, a view which is very much in keeping with Piaget's ideas about what motivates movement from one stage of cognitive growth to another. In fact, Piaget emphasized the importance of activity when he defined intelligence as a process involving organization and adaptation. Describing how children learn, he demonstrated the

importance of discovery as a motivating force and an organizing process.[7] Citing Piaget, Bruner, and Lev Vygotsky, a Russian psychologist who investigated the relationship between thought and language, Britton advocates discovery learning as the best approach for most students under most circumstances.[8] Vygotsky says that education does not teach skills but rather makes students aware of what they are doing and helps them use their skills deliberately, thus building on their tacit knowledge. He further maintains that instruction should be slightly ahead of where the student is so that students may discover concepts for themselves.[9] In fact, say the authors of A Language for Life, one of the "important inferences to be drawn from a study of the relationship between language and learning" is that "all genuine learning involves discovery."[10] Says Wilbert McKeachie:

> Teaching that helps a student find a framework within which to fit new facts is likely to be more effective than teaching that simply communicates masses of material in which the student can see no organization at all.[11]

Walter Clark suggests helping students discover grammar and spelling rules rather than teaching them directly.[12] McKeachie agrees:

> If students can develop their own ways of structuring the material, it is likely to be recalled and used better than if the structure is provided by the teacher.[13]

Additional benefits occur for students who lack confidence in their ability to learn. Once they have "discovered" a rule, concept, or method, they begin to realize that they are capable of thinking and learning well. Moreover, fear of taking English classes is also mitigated when students discover they have indeed been using some of the skills teachers are now asking them to perfect.

Working out a discovery approach to identifying individual learning styles involves a number of steps. First, an initial student survey, such as the one in Appendix A 1, is needed so the teacher can become familiar with some of the general structures each student possesses. Knowing what speech, reading, or journalism classes students have taken, for example, a teacher can relate aspects of composition instruction to similar concepts about giving speeches or writing editorials. Contrasts between spoken and written communication can also be illustrated by beginning with the known and advancing to the less well known.

Moreover, having information about hobbies, musical preferences, and language background can be helpful when students require help finding a topic or providing details. Sometimes students' jobs even suggest an appropriate structure for presenting new information. Comma splices, for example, often make sense to students in terms of not being the appropriate glue or splicing material, and talking in terms of using the right kind of tools for carpentry or sewing takes the mystery out of levels of formality in diction. Students who pilot planes or helicopters can readily appreciate the concept of an outline when it is compared with a flight plan. So, too, can others relate outlining to a blueprint, a recipe, or an architect's drawing. In addition to such an initial survey, a diagnostic writing sample can be employed to acquire additional information about the students' ideas and general skills as writers. Rather than assigning one of the often used "benefits of college" or "plans for the future" kinds of topics, the teacher can ask students to describe the way they generally approach the task of learning something new or fulfilling the requirements of a writing assignment.

Another step that can be taken to elicit information about the students' general framework for learning is to have students talk about their expectations for the course. Rather than dictating policies and procedures as is often done, the teacher can ask the class to develop them based on what they think the course should be or will be like. They can also be asked what benefits they expect to derive from taking the class. Before an open discussion takes place, students can be given time to jot down some ideas and then to talk over their thoughts in small groups in order to overcome the usual first-day reluctance to talk for fear of saying something "dumb." When the list of expectations is formulated, it can be stated in such a way that the general framework for learning about writing is readily apparent. Thus, in their discussion students will discover that they will be learning to write essays that are unified, coherent, adequately developed, carefully presented, and reasonably correct. This framework can then be used by the students in assessing their own work before they submit it. A survey of attitudes about writing such as the one in Appendix A 2 can also be used. Topics to be explored

include how students feel about writing, what they think about their own writing, and how they react to writing assignments. How much non-obligatory writing students do and whether or not they care about becoming good writers are also good questions for such a survey.

The importance of taking this time to discover the students' expectations and general framework cannot be exaggerated, for as Britton reminds us, "Our representations of the shared situation will be different."[14] He continues, "If what takes place lies entirely outside my expectations, so that nothing in my past experience provides the basis-for-modification, then I shall be able to make nothing of it."[15] Thus it is critical that the teacher learn something about the representations and expectations of the students so that they can be taken into account and the experience in the classroom be made meaningful. Doing so is especially important when there is a disparity between the cultural and intellectual backgrounds of the students and their teacher as is often the case in community colleges where children from blue-collar backgrounds are confronted with university-educated teachers from professional backgrounds. It is often as difficult for teachers to

understand students' failure to apprehend literary and artistic metaphors as it is for students to translate such constructs into everyday representations. Likewise, students' failure to participate in discussions may result more from expectations about college lectures and blue-collar reverence for what the professor says than from lack of preparation or failure to comprehend.[16]

After this initial getting acquainted and agreeing on a framework for the class phase is accomplished, learning about learning can become the focus of readings, discussions, experiments, observations, and writing assignments. Students can read one of the articles mentioned previously or turn their attention to the beginning chapters of Peter Lindsay and Donald Norman's Human Information Processing, chapter fifteen of James V. McConnel's Understanding Human Behavior, or to Jack Meiland's College Thinking: How to Get the Best Out of College. These resources can be used as the basis for class discussion just as essays commonly are. Next, students can be asked to observe their own learning habits as they go about a specified task such as reading an essay or learning new words. After they have

recorded what they notice, they can be encouraged to talk and write about what they have discovered about themselves. An additional step is to think about the advantages of doing what they did as well as considering the possible disadvantages of their usual practices. For example, they can be asked to write an essay about their reading habits and then describe how they went about carrying out the assignment.

Another possibility is to announce that a test will be given in a week's time and ask the students to write about how they will go about studying for it. If students need help getting started, the teacher can suggest considering whether they will study alone or with others, a little each day or all at once. Deciding what to study, whether to mark the textbook or take notes, and whether to memorize or concentrate on trying to understand the material should also be considered. Other concerns to be noted are preference for studying aloud or silently, the effects of the pressure of studying for a test, and whether or not students vary their approach depending on the type of material to be learned or test to be taken. In fulfilling the requirements of the assignment and asking themselves

such questions, students will not only be getting to know themselves as learners, but they will also be learning about the strategies of effective learning. On test day, the students can be asked to compare what they actually did with what they said they would do. Consequently, both narration and comparison and contrast techniques will be utilized, and some indications of dependence/independence tendencies as well as sensory motor preference should emerge as students describe their need to "make sense of things," "to get an over-all picture" or just "to learn what has to be learned."

A broader consideration of general study preference can also be undertaken. Here a questionnaire such as the one appended, Appendix A4, can be used as the basis for discussion. Students can get together in small groups, or work alone if they prefer (as independents might), and fill out the questionnaire, commenting and exchanging ideas as they go along. The class as a whole can then try to see what general patterns are revealed and can comment on the advantages and disadvantages of each. Questions for this project should revolve around time, place and favorite

conditions for study. Students' most successful techniques should receive special attention during the discussion. In addition to exchanging this kind of information, students might also speculate about why some of the questions were asked in the first place. They might ask themselves, for example, why the teacher wanted to know what classes they like least, and they might also be curious about what difference it makes if a student prefers working alone to engaging in group projects. Another topic students would do well to consider is what they do when they are faced with a task they feel they cannot accomplish or are having great difficulty with. Are they easily frustrated? Persistent? Systematic? Inventive? A brief essay on this topic might reveal an overlooked strength or suggest new strategies for facing challenging situations. For instance, students who might have thought themselves slow for needing time to think things over before deciding how to approach an assignment may find how necessary to the creative process this reflective period is and learn to value their seeming deficit. Others might learn to appreciate the intuitive insights they had been taking for granted.

Discovery of other learning-style tendencies can be stimulated by directing students to interview another student and then compare that person's answer with their own for the same question. The inquiry can include questions about sensory-motor preference and attitude toward structure, for example. Among questions to be considered are the following:

1. What kind of assignments do you like most? Least?

2. How do you think you learn most easily? By seeing, hearing, or doing? Some combination of these?

3. What kind of class do you like? One that is quiet and predictable? One that is highly structured? One that is lively? Varied?

4. Do you like classes in which the teacher talks and you listen? Or do you prefer ones in which the students participate?

5. Do you like working at your own pace? Or do you prefer having specific deadlines?[17]

Students can compare answers and then write a comparison and contrast paper detailing preferences, or they might write an extended definition, focusing on what they consider to be the ideal classroom situation or kinds of assignments. Such work can be used to enhance instruction on paragraph development.

Another possibility is to ask students to note

their approaches to learning tasks for a given period of time. They might do this by keeping a "learning log." Such a technique will not only focus the students' attention on their learning patterns, but it will also provide a real context for writing. For each task they can record what it was, how they approached it, whether or not this was their usual approach, and how successful it seemed. An important aspect of this assignment is that the teacher demonstrate how it is to be carried out. Periodic conferences to allow for student-teacher interaction are also necessary.

Still another way of helping students become aware of their reactions to learning techniques and situations is to use a questionnaire that permits students to record their experiences quickly and easily by checking off appropriate statements about their reactions to assignments and suggestions for learning. This approach can be especially useful when students have tentatively identified some aspect of their learning style such as sensory-motor preference, for example, and are testing strategies that seem appropriate to it. Proofreading, spelling, or vocabulary improvement suggestions can easily be

evaluated by using a format such as the one found in Appendix A 3.

From the beginning of the semester students can be encouraged to view the idea of variations in learning styles with a positive attitude. They can be helped to see that they are not to be concerned with "right" or "wrong" but with appropriate ways. A reading from Kolb or Witkin or an essay describing such variations in learning styles would be helpful. Once students have completed several of the surveys, questionnaires, interviews, discussions, and so on, they can be asked to draw up a list of what they think are their dominant characteristics as learners. Analysis and classification skills will thus be utilized. Next, formal tests such as embedded figures, matching figures, and an impulsiveness inventory can be used to verify what students have learned about their learning styles. Before taking each test, they can read about the style it identifies. Finally, they can consider whether the results of the test are compatible with what their other research revealed about them. Discussions of results and possible implications of each style would then follow. Students should consider the advantages

and disadvantages of each style. Next they might consider the appropriateness of each style for specific kinds of tasks such as defining, describing, analyzing literature, or completing any of the other typical kinds of assignments which students face. Additionally, they should try to discover what limitations might result from exclusive use of each style and they can be encouraged to consider ways to develop alternate strategies so the field-dependent students, for instance, can learn to focus on individual aspects of a lesson when necessary and independents can begin to pay closer attention to background and people-oriented aspects of what they perceive than they are accustomed to doing. This same procedure can be applied to each of the individual styles identified, including conceptual tempo, level-of-processing, and sensory-motor preferences, among others. Finally, students can be encouraged to try different approaches as appropriate throughout the semester in keeping with the need for helping students learn different strategies. Assignments can be designed in such a way that various demands are made, and students can be encouraged to do those demanding their strengths first, switching to

those requiring alternate strategies only after they have become comfortable and fairly proficient in their preferred approach. Some examples of how this idea of building on strengths and then switching to alternate strategies can be accomplished must next be considered in terms of specific dimensions of learning styles.

Building on Strengths and Learning New Strategies

Probably the first aspect of learning styles to come to light will be the dimension of field dependence/independence, the most widely studied and best understood of the learning styles.[18] According to Witkin and other cognitive psychologists, field dependence and independence are consistent over the complete range of perception. Those who test dependent when given a visual task such as identifying embedded figures will also find themselves to be dependent on structure or context when asked to distinguish specific sounds or words when listening to music or to identify a substance by feel or taste. Similarly, field independents will display their ability to distinguish individual words, sounds, or textures with relative ease.[19]

How can such tendencies be regarded as strengths in a composition class? In the first place, dependent students can be encouraged to develop their preference for structure by being helped to learn about various ways of structuring their writing. For them, learning about topic sentences, kinds of outlines, and ways to begin planning a paper by asking questions or looking for patterns of organization inherent in a topic should prove helpful. Thus, their reading and writing assignments can be directed toward recognizing and building on structure. The first part of the semester can focus on using a structured approach to writing employing one of the many texts which highlight this approach. Judy's "webbing," Young, Becker, and Pike's "particle and field," and Shor's "Utopian inquiry" heuristics might also prove useful.[20] Dependent students can also be encouraged to find the over-all structure of what they read and should be introduced to a structured approach to reading such as SQ4R, which will involve them in skimming, questioning, reading, reciting, reviewing, and writing to improve their comprehension skills.[21] Such students can be encouraged to try to discover or build a framework for any material

that is presented without one. How to write outlines is another especially appropriate topic for them to study. They can also be made aware of the importance of having an over-all picture when trying to fit new information into place by being given readings based on the ideas of Piaget and Britton. One such article entitled "Individual Differences in Learning Styles" may be found in Appendix B 1. With their interest in people, dependent students may be good at analyzing character and understanding motivation in a short-story, play, or novel and can be afforded opportunities for doing so. Working in groups with other students should provide the needed feedback and satisfy some of the dependent students' desires for discussion and interaction. Likewise, dependent students might be good at cause and effect reasoning because of their habit of seeing things in relation to context; consequently, assignments requiring this strength can also be made, although such students may show a tendency to over-generalize.[22] Experiential and associative modes of writing seem to be preferred by many dependent students, so narrative and experience-based assignments should be ones that can be handled well to build up confidence and fluency.[23]

Moreover, students' inclination to ask about possibilities can be encouraged by using a problem-solving approach to some aspects of writing. Judy, Shor, and Shaughnessy, among others, mention problem-solving as appropriate content for the composition class.

In discussing field-dependent students, Chickering says they need "lots of stimuli" in order to learn differentiation.[24] Hence, when it comes time for them to learn opposite strategies, practice in focusing on single aspects of a topic will be very helpful. Such students can be asked to describe only the most vibrant color in a picture or the most disturbing sound on a tape recording, for example. They can also be instructed to write about a single aspect of an essay such as its diction rather than considering structure, theme, organization, and development. Instead of being given assignments where the organization is apparent in the way the assignment is written, they might merely be told to write a paper about the first thing that comes to mind. They should also try freewriting and journal writing. Furthermore, they can be encouraged to become less dependent on what other people think about their

writing and more concerned with whether or not they are satisfied with their efforts. Seymour Wapner's suggestion about placing a dependent person in an unstructured, innerdirected environment as a means of promoting creativity might be tried.[25] Such an action should also promote independence if used carefully. Accordingly, dependent students might be given a longer term assignment and asked to try following through without relying on others for reminders or feedback. During the first part of the semester, for example, they can be required to follow specific directions in writing essays and to submit their work on a given day each time. Later, to encourage independence, they can be permitted to choose what format to use and can be directed to complete their work within a somewhat flexible framework.

As for field-independent students, there are several ways their predominant characteristics can be viewed as strengths in a composition class. First, independents may be very capable of identifying individual aspects of an essay or other kinds of writing being discussed. Isolating the thesis statement or one aspect of an argument should be something they can do

well. In addition, looking for a pattern in what they read or write should also be rather easily accomplished because of their problem-solving propensities and analytical abilities. Accordingly, they can be asked to identify patterns in several essays or in the kinds of fragments they might write or words they misspell. A similar approach might be used to develop vocabulary by presenting independent students with lists of words and asking them to discover relationships. Doing so would also help them build a framework for the words, thereby affording needed practice in discerning structure. Field-independents may be interested in topics relating to problems, numbers, and objects and can be assigned related subjects for reading and writing. Learning how to write reports of scientific information or sociological findings, for example, should prove interesting to them. Such students might also be good at writing descriptions featuring dominant impression and can often save themselves time by being able to focus on one aspect of a problem or assignment without having to see it in perspective. They will probably be able to isolate a topic and develop one segment of it without jotting down all kinds of ideas first.

Consequently, they may be inclined to favor a free-writing or less structured approach over a carefully structured one and should probably emphasize this technique during the first part of the semester. They will probably prefer working alone to working in groups and can be given longer term, more self-directed assignments than can dependent students. Analysis and classification assignments are ones they should be able to complete without a great deal of difficulty. Shaughnessy's contention that ideas are generated in data seems especially applicable for independent students. Providing a great deal of data about a problem or a proposal, for example, will promote inference making and permit moving from simple to more complex ideas.[26]

The key strategy independents need to learn, once they have become strong in using the strengths of their learning style, is integration, says Chickering.[27] To encourage progress in this dimension, Chickering advocates providing such students with ample time for reflection. For instance, during some of the times when dependents are engaging in group discussions and projects, independents may profit from working alone on

a problem requiring material to be integrated into an over-all pattern. They can be asked to observe members of a group during a discussion to discern patterns of interaction. Or they can be directed to pay particular attention to someone's facial expressions for five or ten minutes to note changes and try to discover reasons for them. Each of these exercises will call attention to the social environment not readily perceived by field independents as well as giving them practice in integrating data. All can be used as bases for writing assignments. To help independents learn to perceive a variety of kinds of structure, the teacher might again employ one of Shaughnessy's suggestions. Students can be told to do the following:

1. Look at a subject and keep a list of observations.
2. On the basis of these observations, make a general statement about the subject.
3. Show how the general statement fits the observation.[28]

Observing their own or a fellow student's essays for diction or sentence style might be a good subject for such an assignment.

In the area of impulsivity versus reflectiveness, or conceptual-tempo as it is sometimes

called, students will be seen to vary greatly. When trying to build on their strengths, reflective students, with their need for time to think, can be asked to consider a problem and make suggestions during the next class session. Impulsive students, on the other hand, can be encouraged to participate freely at first and both can be helped to see whether their characteristic response is actually natural to them or is perhaps caused by anxiety. After discovering the effects of anxiety on learning in general, students might take an I-S Inventory such as the one found in Smith, Learning to Learn, or a matching figures test such as the one in J. Kagan, "Reflectiveness-Impulsivity and Reading Ability in Primary Grade Children." Next, steps can be taken to relieve anxiety by making appropriate readings available to those who wish them. According to Snow and Peterson, "Anxious students need the greatest instructional support, including feedback on performance."[29] Such feedback can be given in responding to students' essays as well as in conferences and class discussions. In addition, a relaxed classroom environment where mistakes are viewed as part of the learning process and are not penalized should prove

helpful. Students can be encouraged to explore topics together in small groups and to share their ideas with a few other students as a means of relieving anxiety about speaking in larger groups. In keeping with Cross' call for "guaranteed success" assignments, the teacher might ask students to explain how to do something they already do well or know a great deal about. A review of the original student survey will suggest a number of topics if the students need help in deciding on a subject. Performing a tune-up on one's car or changing a flat tire are natural subjects for many students. Hobbies such as pottery making, horseback riding, water skiing, and gourmet cooking, among others, offer numerous possibilities. Discussions and demonstrations of the advantages of being either impulsive or reflective can be held. Students who are impulsive can be asked to write about a time when they were glad to be quick to think and act, whereas reflective students can provide a narrative about a time when their reflectiveness was especially helpful to them. Next, the class can draw up lists of situations calling for the two strengths. Considering how each style can be an asset to a writer might involve reading selections from Brewster

Ghiselin's The Creative Process or William Gordon's Synectics. An article on creativity such as the one in Appendix B 3 might also be used to demonstrate the appropriateness of both approaches. Finally, the students' findings and reflections can be incorporated into an article on this dimension of learning styles by one or several students and "published" so it can be added to the students' file of information about how people learn. To encourage impulsive students to take their time and reflective ones to formulate their thoughts a little more quickly, the teacher might occasionally suggest taking five minutes to think before beginning a class discussion on the topic at hand.

Sensory-motor preference is another aspect of learning styles that can be identified and built upon in the writing class. As students complete their questionnaires and surveys, auditory learners can be identified by their preference for being told how to do something rather than being asked to read about how to accomplish the task. If asked to name all the cities in Michigan having Indian names, for example, auditory learners will probably employ the alphabet and say the names of cities rather than visualizing the map in order

to identify them. Likewise, when writing they may rely on the sound of words to choose among alternatives and may decide they are satisfied with a sentence when it "sounds right." Further, such students may find themselves learning more by not taking notes during lectures but rather by concentrating carefully. When reading assignments are made, auditory students may require an oral overview of what they are expected to read. Such students can make this apparent drawback a strength by using a tape-recorder for taping lectures, "reading" written lessons they are having difficulty with, and proofreading their papers. Perhaps some can "write" rough drafts of their papers by dictating them. They may even discover numerous topics for writing by concentrating on what they hear at a certain time or in a given place or situation. They can be encouraged to look for the tacit dimension of learning to discover how much they know but cannot say how they know in an auditory sense, noting, for example, how often they or others may comment on something's not "sounding right" even though they know nothing about its operation, as in the case of a piece of machinery malfunctioning. Or they might try to discover what it is about how someone

says something that permits the listener to identify what is said as being humorous, satirical, or ironic. Auditory students may be good at identifying the tone of an essay, poem, or short-story. They may also find the study of dialect differences interesting to write about; "playing" with the sound of words can likewise provide material for one or more essays or poems.[30] They might, for instance, listen to the lyrics of "Words, Words, Words" or "Why Can't the English?" from Lerner and Loewe's My Fair Lady and then list calm words, funny ones, drab words, ugly ones or any number of other types as suggested in the assignment Appendix C 1. When attempting to add new words to their vocabulary, auditory learners should be able to rely on their strength for help with spelling and pronunciation, especially if they have first reviewed phonics.

Once auditory students have learned to build on this strength, they can turn their attention to visual strategies. Given an incomplete outline of a lecture, they can practice notetaking by filling in the missing information during the presentation as English as a Second Language students do. Further, having listed all the sounds they heard during a five minute interval,

they can list them, attach a descriptive adjective to each, and write a brief paragraph about what they heard. Next, they might turn their attention to a visual stimuli -- the books on their desks, for example -- and repeat the procedure. To become aware of the tacit dimension of seeing, they might note how many people they recognize as they walk down the hall between classes. In preparing to give written directions for getting from one place to another, they might draw a map and try to put in the correct street names. Chances are that at least once they will find themselves saying they do not know the name of a certain street but recognize it when they see it.

Visual learners will be recognized by their preference for seeing over hearing. If another student asks them about the meaning or pronunciation of a word and spells it aloud, they will probably ask to see it. Often, in attempting to explain something, they will draw a picture or a diagram, and many such students speak of "seeing" what they are trying to recall. When asked to do something like naming the states adjoining Colorado, for instance, they may visualize a map of that part of the United States in order to answer the

question. Good at picturing things they have never even seen, they can often make an abstraction concrete for themselves by drawing pictures, diagrams, or symbols. Ruth Day speaks of using linguistic and nonlinguistic symbols in organizing her lecture notes and offers an example of a visual learner building on her individual style.[31] Visual students can be encouraged to associate pictures or symbols with such concepts as coordination (=), subordination (≠), or independent clause (>) and (<) for dependent clause. Further, such students can be encouraged to write descriptions and to depend on their visual acuity to help them proofread what they have written.

After visual learners have built up their confidence by writing descriptions and comparisons and contrasts based on visual aspects of their topics, they can turn their attention to listening. They might try to supply sounds to go with the scene they described and can try attending a lecture without taking notes and then write the information down later. In addition, they might listen carefully with their eyes closed for five minutes and make a list of all the background sounds that are usually present but they do not

ordinarily notice. Depending on their location at the moment, they may find themselves later writing about how sound helps them identify what family members are doing in the house at a particular moment, the comings and goings of fellow students in the library, or the melodies of nature. A prewriting exercise requiring use of all the senses is found in Appendix C 2.

Those whose sensory—motor preference is kinesthetic might be especially good at discovering what they think either by using freewriting or by jotting down ideas. They will probably find taking notes on what they read an important reinforcement technique and might profit from immediate practice of what has been taught. Brief writing exercises interspersed in a lecture should be helpful to them. Along with their visual and auditory classmates, these students might profit from being permitted to compose in a non-written medium as a prelude to writing. This idea, offered by Harvey Weiner in Richard Ohmann's Ideas for English 101, has the advantage of drawing on all the senses and promoting the development of critical awareness in a number of ways. Weiner's students use collages, tapes, slides, photo essays and movies to begin their

investigation of a theme. Making something out of wood, clay, fabric or other materials would also be possible. Description, narration, and exposition can all be approached in this manner.[32] The idea of composing in a non-linguistic medium also has the advantage of stimulating "right brain" or intuitive and creative activities. Being able to meet the requirements of an assignment by writing a poem, composing a song, or acting out a narrative would also be appropriate. John Ciardi's essay, "An Ulcer, Gentlemen, is an Unwritten Poem," provides a perfect lead-in for such an assignment. (See also, Appendices A-5 and B-4.)

Later, those students who prefer an active approach to learning, as well as those whose primary style is intuitive, can be introduced to problem-solving and decision-making techniques and required to follow a definite plan in writing an essay. By demonstrating how to define the problem clearly, list possible solutions, examine alternatives, make a decision, and formulate a backup plan, the teacher can provide all students with a workable format both for thinking and writing. An assignment to tell how to prepare for a job interview or decide what courses to take next semester should prove

useful.

One final aspect of learning styles that lends itself well to consideration in the composition class is level-of-processing. How much of this dimension is innate and how much results from teaching and testing practices is uncertain, but students' tendencies to either dig deep and try to discover essential aspects of a topic or to be satisfied with surface meanings and seemingly unconnected pieces of information can be easily noted in what they say and write. Surface-level processors generally do well on multiple-choice and completion exams whereas deep-level processors frequently find themselves choosing the wrong answer on such tests because they have thought about the question too much or are relating it to what they already know from other classes or outside sources. On the other hand, deep-level processors are usually good at taking essay tests and providing the necessary development in writing assignments. Both of these types of learners can be encouraged to consider the advantages of their styles and to discuss their observations with fellow students. Next, they can be instructed to consider the advantages of the opposite style and each group can be

offered information about how to develop this strategy. An essay dealing with the topic such as the one appended, B 5, can be read at this point to integrate the ideas students have discovered. Both groups might be reminded of the SQ4R approach to reading and be given time to practice looking for the kinds of information required under varying circumstances. Deep-level processors can be asked to look for specific facts such as names, dates, and places to help them develop some surface-processing skills; surface-level processors might be instructed to find relationships and underlying causes to foster deep-processing abilities. Assignments designed to help students distinguish among kinds of information would be helpful for both groups. Thus, students might be required to categorize information in a given text selection as essential, significant, or supplementary. Finally, they can be helped to discover the kinds of answers required by various types of questions and can be introduced to a systematic procedure for answering essay questions. An example of such an approach can be found in Appendix C 5.

In responding to written assignments and tests, teachers may depend on pertinent questions to stimulate

thinking. McKeachie attests to the effectiveness of questions and suggests that pointing out relationships, asking rhetorical questions, and trying to elicit examples of how students apply concepts to their own experience can be accomplished during lectures as well as in writing.[33] "Have you thought about ...?" "What do you think will happen if ...?" "Might there be a relationship between what you say and ...?" and "Have you asked yourself why ...?" are examples of such questions. Teachers can also keep level-of-processing in mind when they make assignments or develop tests. Directions to list, recall, enumerate, and specify can be used to actuate surface-processing. On the other hand, calls to evaluate, invent, hypothesize, infer, generalize, or design will motivate more extensive thinking. Open-ended questions will have a similar effect. Because "people remember information better when they process it deeply and elaborately," emphasis should be on "devoting more attention to the meaning and classification of an idea suggested by a symbol than to the symbol itself."[34]

Admittedly, it would be difficult for a teacher to address so many individual learning styles during the course of one semester. Nor could most of the

suggestions offered in this article be implemented within such a time frame. Yet, it is possible to focus on one or two dimensions of learning styles and be at least subsidiarily aware of the others so they can be recognized and built upon as students' gifts and needs are perceived. In employing a discovery approach to the problem of identifying learning styles and integrating information about them into the basic writing class, the writing teacher can make it possible for students to discover and make use of strengths they may have been only marginally aware of and in fact may not have considered strengths at all.[35] In requiring a great deal of writing and making the language of the discipline of writing a large part of the on-going content of the course, the plan will promote language awareness and increased facility in writing. Moreover, learning to recognize and build on their strengths and to adopt alternate strategies as needed will enable students to assume responsibility for their own learning. Granted, the illumination stage of the creative process described by Henri Poincaré cannot be guaranteed by employing a learning-styles approach to teaching composition, but at least it can be made

possible as students learn to build on their own personal framework as well as on what is already part of their culture.[36]

Results of One Test of the Theory

When such an approach was tried in a developmental writing class at Henry Ford Community College, Dearborn, Michigan, several of the expected benefits were verified. Although not all students in the class of twenty-five were able to produce a final impromptu judged competent by impartial evaluators, they did make progress and they performed nearly as well as comparison students who began the course with higher impromptu scores and better reading levels. They also chose a broader range of topics and employed greater variety in presenting their ideas than did students in the comparison class.[37]

Moreover, students who were helped to determine their individual learning styles and were encouraged to view these as strengths showed a decided improvement in their attitudes about writing as measured by a survey administered both at the beginning and end of the semester. On every one of the twelve measures surveyed, these students demonstrated a favorable change in

attitude ranging from a slight improvement of 5% on getting going on writing assignments as soon as possible to a 50% improvement in feeling good about their writing. By the end of the semester all of the students wanted to become good writers and 76% believed that their goal was attainable. Not only that, but 11% more were writing when not required to do so and writing down ideas to see if they made sense. One student reported getting up in the middle of the night to write about the death of a friend. It was only when she put her thoughts on paper, she said, that she could begin to cope with the trauma; yet, writing about her problems was something she had never thought of doing in the past. Others found writing a problem-and-solution essay a worthwhile eperience, with several commenting that seeing their problem spelled out made it seem less complicated and adding that they would use the procedure again.

An additional benefit of the learning-styles approach was the retention of a greater than usual number of students, particularly those with tenth grade or below reading levels. While it is true that these were the same students whose final impromptu essays were

not judged competent, these students benefited from completing the course, if in no other way than by avoiding the stigma of failure often attached to dropping out. In fact, all but two wrote at least one competent impromptu during the semester and all had written more than one acceptable essay outside of class. Further, even the two who could not produce a unified, coherent, adequately developed and reasonably correct impromptu had made progress. One had finally mastered the concept of writing in complete sentences and the other could occasionally complete his work within the allotted time.

Also encouraging was the fact that many students demonstrated a willingness to assume responsibility for their own learning. A number of them asked about ways to study for other courses both during the discussion of level-of-processing and when it came time for final exams. Others went to the Learning Laboratory on their own and still others made an effort to correlate what they were learning in sociology, psychology, and criminal justice classes, among others, with assignments for English class. Even the very fact that they were able to judge the timing of the last

three assignments to avoid having everything due at once was significant, particularly for dependent students who often find setting their own pace a difficult task. Admittedly, not everyone was able to get by without some prodding and a few students required numerous admonitions about their attendance, but, on the whole, students did evidence a sense of responsibility. Moreover, most began to take care in presenting their ideas, submitting papers that were legible and unmarred by the scratching out and writing over prevalent in their early work. In this respect, the final essays of the learning styles students were decidedly superior to those of the comparison class.

The learning styles approach offers benefits for students and it can be helpful to the teacher who uses it. In the first place, it was gratifying to hear some students say they were beginning to like writing and to see others display increased confidence about learning. Being shown an A or B grade on a history or psychology paper prepared in the learning styles class was also satisfying to me. Further, the learning styles approach offers a way of gauging the effects of various instructional techniques and provides a basis for

understanding some of the interactions occurring in the classroom, especially between student and teacher. No longer did the diffident student who made his displeasure at being asked to work in groups and his reluctance to participate in class discussions obvious make me feel he was being critical of me as a teacher or critical of his fellow students. Instead, his apparent field-independent tendencies provided a clue for making assignments and offering choices more compatible with his learning style. This challenge of trying to vary assignments and approaches to fit his and other students' needs made teaching the developmental writing course a rewarding learning experience both for me and for the students.

The idea of using learning-styles information in teaching composition is especially promising because it encourages both instrumental and developmental growth by helping students learn to improve their writing and get to know themselves as learners at the same time. In addition, such an approach provides a way to consolidate insights gained from psychology, philosophy, education and composition research and serves as an important first step in promoting the emotional and intellectual development of college students, enabling

them to strengthen their self-confidence and self-reliance and to expand their meta-cognitive abilities. Making an effort to identify and build on students' strengths as learners is an especially appropriate approach in community colleges and open-door institutions where students are often unsure of themselves and unfamiliar with the conventions of the academic world. A learning-styles approach to teaching composition builds on an existing framework and takes advantage of students' natural self-interest to provide them with sufficient information to develop several beginning essays. It also helps to motivate them to do so. Moreover, it promotes flexibility and a sense of responsibility for their own learning. Finally, the approach is capable of bringing about the desired objectives of a composition class -- that is, improved writing and a confident attitude about writing. Undoubtedly, more research is needed and the plan described in this article requires some refinement, but, as Claxton and Ralston note in writing about using learning styles information in teaching any subject: "[T]he findings that are available already are certainly promising for more effective learning."[38]

Notes

[1]Stephen Judy, The ABC's of Literacy: A Guidebook for Parents and Educators (New York: Oxford University Press, 1980), pp. 76-82.

[2]K. Patricia Cross, Accent on Learning (San Francisco: Jossey-Bass, Inc., 1976), p. 132.

[3]Stanford Ericksen, Motivation for Learning (Ann Arbor: The University of Michigan Press, 1974), p. 244.

[4]Gilbert Ryle, The Concept of Mind (New York: Barnes and Noble, Inc., 1949), pp. 25-35.

[5]Jerome Bruner, "Learning and Thinking," in Problems and Issues in Contemporary Education, ed. Edward J. Shoben, Jr., et al. (Glenville, Illinois: Scott Foresman and Co., 1968), p. 71.

[6]Education Index lists numerous such tests and inventories. Descriptions of several may be found in Nancy Dixon and Shary Schwabenlender, Learning Styles and the Adult Learner, Part II (Chicago: Central Education Network, 1983), pp. 8-23.

[7]John Flavell, The Developmental Psychology of Jean Piaget (New York: Van Norstrand and Co., 1971).

[8]James Britton, Language and Learning (New York: Oxford University Press, 1970).

[9]Lev S. Vygotsky, Language and Thought, trans. and ed. Eugenia Hanfmann and Gertrude Vakar (Cambridge: The M.I.T. Press, 1962), p. 104.

[10]A Language for Life, p. 50 as quoted by Richard W. Bailey, "Writing Across the Curriculum: The British Approach," in Fforum: Essays on Theory and Practice in the Teaching of Writing, ed. Patricia J. Stock (Upper Montclair, New Jersey: Boynton/Cook, Inc., 1983), p. 26.

[11]Wilbert J. McKeachie, Teaching Tips: A Guidebook for Beginning College Teachers, 7th. ed. (Lexington, Mass.: D. C. Heath and Co., 1978), p.228.

[12]Walter J. Clark, Jr., "Lecture, " The University of Michigan, Ann Arbor, 19 Jan., 1982.

[13]McKeachie, p. 228.

[14]Britton, p. 15.

[15]Britton, p. 15.

[16]See K. Patricia Cross, Beyond the Open Door (San Francisco: Jossey Bass, Inc., 1974), pp. 32-55 for a discussion of blue-collar attitudes and expectations.

[17]Such questions are suggested by Rita and Kenneth Dunn, Practical Approaches to Individualizing Instruction (West Nyack, New York: Parker Publishing Co., Inc., 1972). Their learning style model encompasses emotional, sociological, and environmental preferences in addition to physical and psychological tendencies. See Teaching Students Through Their Individual Learning Styles (Reston, Virginia: Reston Publishing Co., 1978); pp. 5-17.

[18]Sheldon J. Korchin, "The Legacy of Herman A. Witkin," Contemporary Psychology, 27 (1982), 602.

[19]Herman A. Witkin, "Cognitive Style in Academic Performance and in Teacher-Student Relations," in Individuality in Learning, ed. Samuel A. Messick (San Francisco: Jossey-Bass, Inc., 1976), pp. 42-44.

[20]Judy, pp. 287-88; Richard E. Young, Alton L. Becker, and Kenneth L. Pike, Rhetoric: Discovery and Change (New York: Harcourt, Brace and World, Inc., 1970), pp. 126-129; Ira Shor, Critical Teaching and Everyday Life (Boston: South End Press, 1980), pp. 169-179.

[21]Francis P. Robinson. Effective Study (New York: Harper and Row, 1946.

[22]Grace C. Cooper, "The Teaching of Composition and Different Cognitive Styles," Conference on College Composition and Communication, March, 1980 (ERIC-ED 186915) p. 6.

[23]Dale W. Holloway, "Cohesion in English: A Key to the Way Our Culture Thinks," Conference on College Composition and Communication, March, 1981 (ERIC-ED 190726) p. 19.

[24]Arthur W. Chickering, "Commentary: The Double Bind of Field Dependence/Independence in Program Alternatives for Educational Developments," in Individuality in Learning, ed. Samuel A. Messick (San Francisco: Jossey-Bass, Inc., 1976), p. 83.

[25]Seymour Wapner, "Commentary: Process and Context in the Conception of Cognitive Style," in Individuality in Learning, ed. Samuel A. Messick (San Francisco: Jossey-Bass, Inc., 1976), p. 78.

[26]Mina Shaughnessy, Errors and Expectations (New York: Oxford University Press, 1977), p. 246.

[27]Chickering, p. 83.

[28]Shaughnessy, p. 251.

[29]Richard Snow and Penelope Petersen, "Recognizing Differences in Student Aptitudes," in Learning, Cognition, and College Teaching, ed. Wilbert J. McKeachie (San Francisco: Jossey-Bass, Inc., 1982), p. 15.

[30]Britton (p. 87) cites Russian psychologist Chukavsky's idea that playing with words will lead to thinking. Vygotsky expresses a similar idea.

[31]Ruth S. Day, "Teaching from Notes: Some Cognitive Consequences," in Learning, Cognition, and College Teaching, ed. Wilbert J. McKeachie (San Francisco: Jossey-Bass, Inc., 1982), pp. 95-111.

[32]Harvey Weiner, "Media Compositions: Preludes to Writing," in Ideas for English 101, ed. Richard Ohmann and W. B. Coley (Urbana, Illinois: National Council of Teachers of English, 1975), pp. 150-158.

[33]Wilbert J. McKeachie, "Implications of Cognitive Psychology for College Teaching," in Learning, Cognition, and College Teaching, ed. Wilbert J. McKeachie (San Francisco: Jossey-Bass, Inc., 1982), p. 89-90.

[34]Ronald Schmeck, "Improving Learning by Improving Thinking," Educational Leadership, 38 (1981), 384.

[35]Some students, for example, see no advantage in being auditory learners; others focus on their inability to go "straight to the point" and fail to realize that being able to perceive wholes and react to people with whom they are interacting are strong building blocks for learning.

[36]Henri Poincaré, "Mathematical Creation," in The Creative Process, ed. Brewster Ghiselin (New York: The New American Library, 1952), pp. 33-42.

[37]Fabien, Miriam G., "Using a Learning-Styles Approach to Teaching Composition," Dissertation. The University of Michigan, 1984.

[38]Claxton, Charles S. and Yvonne Ralston. Learning Styles: Their Impact on Teaching and Administration. Washington, D.C.: American Association for Higher Education, 1978. AAHE/ERIC Higher Education Report No. 10.

APPENDIX A 1

STUDENT SURVEY

Name_____ Year of graduation or GED? _____

Status: New student_____ Returning student_____

Transfer student_____ Full-time_____ Part-time_____

Is this your first college English class? _____

If not, what others have you taken?_____

_____

Are you now taking a speech class?_____

Have you ever taken one? _____

Are you now taking a reading class?_____ which one? _____

Have you taken a reading class in the past? _____

College?_____ High School?_____

Do you now or have you ever worked on a school newspaper, yearbook or other publication?_____
When?_____ In what capacity? _____

What newspapers do you read? _____

Daily or almost daily?_____

Weekly?_____

Sometimes?_____

What magazines do you generally read?_____

Weekly?_____

Monthly?_____

Occasionally?_____

What kind of books do you like to read?_____
_____

Have you ever studied a language other than English?
_____

What language?_____ How long?_____

Can you speak a language other than English, whether you have studied it or not?_____ What?_____
_____

Can you read one?_____ What?_____

Can you understand one even though you cannot speak or read it?_____What language?_____

Is English the primary language spoken in your home? If not, what is?_____

What are your hobbies or special interests?_____
_____

Do you like music?_____What kind?_____
_____

Who are your favorite musical performers?_____
_____

Do you like movies?_____What kind?_____
_____

Have you seen any good movies lately?_____What?_____
_____

Do you like to watch television?_____What are your favorite shows or kinds of programs?_____
_____

Do you watch them regularly?_____

Do you have a paying job at present?_____

What is it?_____ Full-time?____ Part-time?____

Additional comments?_____
_____
_____
_____
_____

APPENDIX A 2

ATTITUDE SURVEY

Name _____

Please put a check mark in the column that most closely matches what you do or feel about each statement.

		Almost never	Sometimes	Frequently
1.	I like to write.			
2.	I dislike writing.			
3.	I write when I don't have to.			
4.	Sometimes I write down my ideas to see if they make sense.			
5.	I feel good about what I write.			
6.	I don't know what to think about what I write.			
7.	I think my writing is bad.			
8.	I would like to be a good writer.			
9.	I don't really care how I write.			
10.	I can become a good writer if I want.			
11.	When I have a writing assignment to do, I get going as soon as possible.			
12.	When I have a writing assignment to do, I put it off as long as possible.			
13.	I plan what I am going to write.			
14.	I don't plan; I just write.			
15.	Writing should always be planned.			
16.	I prefer writing assignments that require me to follow a specific plan.			
17.	I prefer writing assignments that permit me to follow my own plan.			

APPENDIX A 3

SUGGESTION CHECK LIST

Format in which suggestion was presented: check whatever applies:

_____ oral _____ written handout _____ personal _____ as a different approach to an assignment _____ as an alternate approach to an assignment _____ as part of other material

Suggestion tried:

Results: _____ worked well _____ worked fairly well didn't work _____ didn't work this time but has promise___

Analysis of results: check what applies.

This approach probably worked because:

_____ I like doing things that way.

_____ It is similar to other things I have tried.

_____ It is the kind of thing I'm good at.

_____ I tried it several times.

_____ I tried it when I was in a good mood.

_____ I tried it when I had plenty of time.

_____ I wanted it to work.

Some other reason

This approach probably did not work because:

_____ It is too new for me.

_____ I didn't really understand it.

_____ I didn't try very hard.

_____ I quit after one try.

_____ I don't like doing things that way.

_____ It's the kind of thing I'm not good at.

_____ I tried it when I was in a bad mood.

_____ I tried it when I was very busy.

_____ I didn't care if it worked.

_____ Some other reason.

Additional Comments:_____

_____

APPENDIX A 4

LEARNING STYLES QUESTIONNAIRE

Do you like everything to be clear-cut and straight forward? _____

Do you like assignments to be carefully spelled out, step by step? _____

Do you like to work on your own? _____

If you have a lengthy assignment to do, can you pace the work so that there is not too much to do at one time? _____

Do you like to work with other people on assignments and tasks? _____

Do you like working with numbers and objects? _____

What kinds of classes do you prefer? Lectures? Discussions? _____

Do you like classes where you have to do something such as give a report, conduct a discussion, or make something? _____

What kinds of classes do you usually do well in?__Math? Science?__ English?__ Speech?___ Social Studies? Art?___ Music? ___ Physical Education? _____

What kinds of tests do you prefer? Essay?____ Short answer?____Is that the kind you do better on?_____

Do you find that you work harder when friends, parents,

or teachers praise what you do? _____

What gets you going when you have a difficult assignment to do? _____

What gets you going when you have a boring assignment to do? _____

Of your high school classes or the college courses you have taken so far, which one or ones did you like best? Why? _____ _____

Which did you like least? _____ Why? _____ _____

Which one did you find most beneficial? _____ Why? _____

Which one was least helpful? _____ Why? _____ _____

Would you rather learn about a new topic by reading about it or hearing about it first? _____

Do you like to work with your hands? _____

Do you have difficulty learning something if you can't see where it fits into the general scheme of things for that course or subject matter? _____

Do you like to analyze situations and try to solve problems? _____

APPENDIX A 5

SENSORY MOTOR PREFERENCE

Please put the most appropriate answer on the line to the right of the question.

1. If someone is giving me directions for how to get somewhere that is some distance away, I would rather,

   a. be given verbal directions
   b. be given a map or drawing
   c. make my own map or write the directions down. _____

2. If someone spells a word and asks me what it means or how to say it, I usually

   a. answer right away
   b. say, "Let me see it."
   c. spell it to myself
   d. write it down. _____

3. When I am trying to learn something new, I usually get more out of

   a. having it explained to me orally
   b. reading about it
   c. listening and writing
   d. reading and writing
   e. listening and reading. _____

4. When I am trying to describe or explain something, I

   a. just say it
   b. draw a picture or a diagram
   c. write it down
   d. say it and use my hands to describe it. _____

5. When I hear a new recording in which the words are fairly clear, I usually

   a. understand most of the words right away
   b. have to listen a few times before I can catch the words
   c. listen to both words and music first. _____

6. If someone asks me to list something like the major mountains in the United States, I

   a. just say them, going through the alphabet if I get stuck
   b. "see" a map of the U.S. in my mind and then say them. _____

7. To remember the spelling of an unfamiliar word, I need to

   a. spell it, preferably aloud
   b. just see it
   c. write it down
   d. see it, say it, and write it. _____

8. In general, it is easier for me to

   a. remember how something sounds
   b. remember how something looks. _____

9. When a teacher lectures, I usually
   a. just listen
   b. listen and take notes
   c. vary what I do depending on the class. _____

10. When I proofread my papers, I usually

    a. read them aloud to see how they sound
    b. read them silently
    c. read them twice, once aloud and once silently. _____

11. When I have to decide which of several words to use in a sentence, I consider the meaning and then I

    a. choose the one that sounds right
    b. choose the one that looks right
    c. choose either one
    d. try to find one that both looks and sounds right. _____

12. In trying to learn a second language, I learn more easily by

    a. listening and talking
    b. reading
    c. repeating what a teacher or someone else says. _____

APPENDIX B 1

INDIVIDUAL DIFFERENCES IN LEARNING STYLES

According to Swiss epistemologist Jean Piaget, children go through very definite stages in learning to think and speak. Starting soon after birth, they begin to learn through a process of assimilation and accommodation to relate new experiences to past ones. By reacting to whatever they see, feel, hear, or otherwise experience, they begin to build a framework or structure to organize what they perceive. As new experiences occur, they are related to the existing framework and it is adjusted or added onto to make a place for the new information. This process is repeated throughout life every time new experiences occur and each time something is to be learned. However, not everyone builds or modifies the existing framework in exactly the same way.

James Britton, researcher and long-time instructor at the University of London, expresses a similar idea in his book, Language and Learning, when he says that people learn by relating new ideas to past ones in order to make sense of them. From this representation, they generate expectations about the

future. As events occur, these expectations enable them to interpret the present, but their representations differ from each other's. These representations or frameworks are influenced not only by past experiences but also by moods, personalities, and habitual ways of seeing things. Thus, individual ways of learning will also differ. For example, indicates Britton, children vary greatly in the amount of listening they do before they begin to speak.

Psychologist Jerome Bruner, who has devoted most of his professional efforts to research on learning, emphasizes the need to take individual learning styles into account in any theory of instruction. Bruner speaks of three ways of apprehending the world and building structures --doing, imaging, and symbolizing --and says it is important to pay attention to people's individual preferences for learning through doing, seeing, or listening. Of individual differences, he says:

> Quite plainly, they exist in massive degree- in the extent to which children have problem-solving predispositions, in the degree of their interest, in the skills that they bring to any concrete task, in their preferred mode of representing things, in their ability to move easily through any particular sequence, and in the degree to which they are initially dependent

upon extrinsic reinforcement from the teacher.[1]

Cognitive psychologists say that there are a number of good reasons for concentrating attention on learning styles. For one thing, styles are better focal points than IQ measurements and achievement tests because they are non-judgmental and are not directly related to intelligence. Moreover, learning styles themselves are neither good nor bad; instead they are appropriate or not appropriate depending on the context in which the learning is occurring. Says Herman Witkin of Educational Testing Service, "We also saw that each style is likely to contribute to high achievement in the area to which it is suited."[2]

Learning styles are a complex result of a number of factors including culture, child-rearing practices, personality, past experiences, perception, memory, and self-concepts. Patricia Cross, who writes primarily about college students, summarizes what is known about learning styles as follows:

> People see and make sense of the world in different ways. They give their attention to different aspects of the environment; they approach problems with different methods for solution; they construct relationships in distinctive patterns; they process information in different but personally consistent ways.[3]

Because these differences are so pervasive and important, says Cross, "Teachers and students should be helped to gain some insight into teaching and learning styles.[4] One of the key aims of the course will be to develop this insight.

Notes

[1]Jerome Bruner, Toward a Theory of Instruction (Cambridge: The Belnap Press, 1966), p. 71.

[2]Herman A. Witkin, "Cognitive Styles in Learning and Teaching," Samuel A. Messick and Associates, Individuality in Learning (San Francisco: Jossey-Bass, Inc., 1976), p. 72.

[3]Patricia Cross, Accent on Learning (San Francisco: Jossey-Bass, Inc., 1976), p. 115.

[4]Cross, p. 116.

References

Cross, Patricia. Accent on Learning. San Francisco: Jossey-Bass, Inc., 1976.

Britton, James. Language and Learning. New York: Pelican Books, Inc., 1976.

Bruner, Jerome. Toward a Theory of Instruction. Cambridge: The Belnap Press, 1966.

Flavell, John. The Developmental Psychology of Jean Piaget. New York: Van Norstrand, 1971.

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APPENDIX B 2

FIELD DEPENDENCE AND FIELD INDEPENDENCE

In studying individual approaches to learning, psychologists have identified twenty-five separate aspects of learning styles and have studied about a dozen of them systematically. Chief among those that have been researched are field dependence and field independence, sensory motor preference, reflectiveness versus impulsivity, depth of processing, and right and left brain dominance. Of these, the one which appears to be the most significant and which has been studied most extensively is that of field dependence and independence.

When psychologists talk about field dependence and independence, they are referring to the initial way in which people apprehend what they see, feel, hear, and otherwise experience through their senses. The dependence and independence with which they are concerned relates to the context of what is being perceived; as they are used in connection with learning, the terms do not refer to personality or have the connotations associated with being an independent or dependent person. Nor do they have anything to do with

intelligence or ability.

What the terms independence and dependence do refer to are people's tendencies to notice either the context of what they are perceiving or individual aspects of it first. People who are field dependent, also called field sensitive by those who see negative connotations in the word dependent, pay attention first to the context of what they are encountering. They note the over-all structure first and then go on to details. If they are viewing a scene, for example, they will notice the background and other aspects of the general view first and will then notice significant details. Field independent people, on the other hand, will first notice an isolated detail such as a central figure or building; after that, they will become aware of the general panorama.

Field dependent people are said to be "global" thinkers because they like to put things into perspective before focusing on any one aspect or issue. They are often described as being people-oriented and are said to exhibit a great deal of social sensitivity. As a result, they are often found working in the social sciences, in the humanities, and in service occupations

which require them to deal with people directly. Field dependent people generally like structure and are good at discerning it. Most have well-developed verbal skills and often pay a great deal of attention to faces as a major source of information from those with whom they are interacting. For them, extrinsic rewards such as praise from peers can be very important.

Field independent people, on the other hand, are described as those who attend to the individual features of what they experience first and then notice the background or surroundings. For them, differentiating objects from their context is much easier than it is for field dependent people. Independents, says Samuel Messick, tend to be less people-oriented than dependents, liking, instead, to work with numbers and objects. They have good analytical abilities and are often found working in math and the sciences. For them, intrinsic rewards such as the satisfaction of doing a job well are as effective as extrinsic ones.

If given an embedded figures test (small shapes hidden inside larger ones), independents will see the hidden figures or shapes fairly quickly. Some may even

say that what is hidden "pops out." Field dependents, in contrast, may have great difficulty seeing the embedded figures and some will not see them at all. Attempts to isolate sounds, odors, taste, and texture will produce similar results.

What is important to keep in mind is that neither of these styles is good or bad; instead, they are appropriate or inappropriate or efficient or inefficient depending on the task at hand. Nor are people generally all one or the other in their appraoch to learning. In fact, the ideal situation is to be able to build on the strengths of the tendency that is natural and then to learn to use the strategies associated with the opposite style as required in varying circumstances. A combination of the social awareness and verbal facility of the field dependent style with the analytical and sharp focusing abilities of the independent style would be advantageous to any student.

References

Cross, K. Patricia. Accent on Learning. San Francisco: Jossey-Bass, Inc., 1976.

Messick, Samuel A. Individuality in Learning. San Francisco: Jossey-Bass, Inc., 1976.

APPENDIX B 3

CREATIVITY--WHAT IS IT?

Often we hear people say, "You're so creative. I wish I had your talent." Or we hear, "If only I were creative, I would paint a beautiful picture, design a towering building, compose stirring music, sculpt, write poems, or weave an elegant fabric." Still other people may admire a friend's ability to work with wood, copper, or semi-precious stones. We hear of creative cooking, creative stitchery, and even creative problem-solving. Yet, the meaning of the word remains elusive.

Just what it is that permits people to accomplish something unique enough to be called "creative" is difficult to pinpoint, yet important enough to be eagerly sought. Exploring space, conquering cancer, and resolving disputes between nations, among other challenges, all depend just as much on the existence of creativity as do writing a play, choreographing a ballet, or fashioning a graceful vase. Consequently, it is not mere admiration or envy which causes people to try to discover what fosters creativitiy and to determine how the creative process works.

From the time of Plato and Aristotle on, philosophers, poets, artists, educators, and others have speculated about the nature of the mysterious process whereby people invent new tools, discover unique relationships, and give life to such treasures as Michelangelo's "David," Shakespeare's "Hamlet," the Golden Gate Bridge, or Stephen Spielberg's "ET." Many creative people including Albert Einstein, Sigmund Freud, and Henry James, among others, have even recorded their experiences in an effort to understand what accounted for their achievements.

Like many such people, novelist Virginia Woolf found that ideas came at unpredictable times and could not be summoned at will. Frequently she wrote of not being able to "spin a sentence" or of "feeling no great impulse." There was, she said, "no fever, only a great pressure of difficulty." In spite of such problems, there were numerous times when ideas came "in an instant," all planned out. Of her novel Three Guineas, she wrote, "I have at this moment, while having a bath, conceived an entire new book ... . Lord, how exciting."[1]

Mathematician Henri Poincaré also recalled times when a "flash of insight" had helped him solve a

vexing problem or formulate an important theorem. Each time, the inspiration had long eluded him only to appear when he was attending to something else. Thinking about his experiences and those of others who had offered unique contributions to the world of art or thought, Poincaré isolated several elements which all had in common. These he called preparation, incubation, illumination, and verification.[2]

According to Poincaré and others who have verified his analysis of the creative process, the period of preparation invariably involves a time of intense effort to master the knowledge and skills required for achievement in the particular field, whether it be art, music, dance, mathematics, philosophy, or architecture. During this time, there generally occurs some excitement about a problem and intense concentration on it, usually without the hoped for breakthrough appearing. Next comes a time of rest or distraction during which the problem or challenge is set aside temporarily but not forgotten. Then, as a rule, sometime during this incubation period creativity manifests itself as a "sudden" answer, insight, inspiration, or intuition. A feeling of excitement

about the idea and a conviction of its "rightness" often accompany the insight. Finally, it is time to scrutinize the idea and work it out or, if it does not prove worthwhile, to reject it. This is the period Poincaré calls verification.[3]

Running throughout all the descriptions in a book called The Creative Process, edited by poet Brewster Ghiselin, is the same theme of creativity being a natural, surprising phenomenon that cannot be invoked at will nor experienced without being preceded and followed by hard work. Artists, writers, and scientists all affirm the necessity of allowing time for ideas to develop and of being open to all kinds of possibilities rather than settling on one inspiration prematurely. Willingness to "play with ideas" and to try to see things from a new perspective are additional prerequisites of any creative act. Says Thomas M. Comella, of Machine Design magazine:

> The act of discovery is rooted in the awareness of anomaly. In learning about a given situation or problem, most people tend to accept the very premises that prevent a creative solution. Much time and energy are spent following dead ends. At some point in the process, the creative thinker, sees a 'heretic' fact that does not fit well with its

> context. He mentally experiments with the anomaly until a new, more powerful comprehension of the situation or problem is achieved in which the anomaly plays a pivotal role. This comprehension opens up new avenues of thought which lead to previously unsuspected solutions.[4]

A further characteristic highly compatible with creativity is a sense of individuality. Creative people are generally independent thinkers. "They resist pressures to conform. They choose to be different in matters that make a difference to them. Their independence allows them to develop more far-reaching premises, makes them alert to unexpected events and off-beat ideas, and triggers the conception of highly original thought patterns, views, and solutions."5

What emerges from all of the discussions and observations is a description of creativity as an elusive characteristic that cannot be demanded or guaranteed; yet, it can be invited and will appear if adequately prepared for. It is not restricted to artistic expresion as in performing Chopin or fashioning a statue, but rather it embraces also thinking, problem-solving, decision-making, and inventing. Instead of wishing to be creative and bemoaning their fate if they are not, people can and should take steps

to foster creativity in their own lives. William J.J. Gordon suggests that people can tap their creativity by taking steps to "make the strange familiar and make the familiar strange."[6] In a book called Synectics, he outlines a systematic program for exploring the fundamental aspects and ramifications of the strange in order to make it familiar and transposing everyday ways of looking and responding in order to see the familiar in a new light. As such goals are achieved, the way is paved for creative energy to be released. By working hard, by permitting ideas to grow at their own rate and in their own fashion, and by developing a questioning and independent attitude, we can all encourage creativity's frequent, even if unpredictable, visitations. With poet Robert Frost, we will then experience "the pleasure of taking pains."

Notes

[1]Virginia Woolf, A Writer's Diary, edited by Leonard Woolf (New York: Harcourt Brace Jovanovich, Inc., 1954), p. 162.

[2]Henri Poincare, "Mathematical Creation," in Brewster Ghiselin, The Creative Process (New York: Mentor Books, 1952), pp. 33-42.

[3]Poincare, p. 42.

[4]Thomas M. Comella, "How to Manage Creativity Without Killing It," Machine Design (March 6, 1975), p. 71.

[5]Comella, p. 71.

[6]William J. J. Gordon, Synectics (New York: Harper and Row, 1961).

APPENDIX B 4

SENSORY-MOTOR PREFERENCE IN LEARNING

One of the many ways in which people differ in their approach to learning is in what is commonly called sensory-motor preference. Whether people favor learning by seeing, hearing, or doing has much to do with their individual ways of reacting to stimuli. Generally, according to cognitive psychologists, children favor a kinesthetic or doing approach to what they encounter. Hence, they like to touch, pick up, feel, or otherwise handle what they see. As they grow older, they learn to rely on the visual or spatial method. Consequently, they become better able to understand something or learn something by looking at it, either directly or in a picture, painting or other representation of it. Finally, the verbal or auditory approach comes into play. Now sounds and words can sometimes replace the item and still the idea will be understood. Words such as "love," "happy," and "good" begin to make sense to the child as well. Gradually, children increase in ability to integrate information obtained through one sense with information from another. By the time they reach adulthood, people can generally use all three

styles fairly well. Yet, even adults nearly always prefer one method of receiving information over the others. Thus, one will prefer to read what is to be learned, while another will prefer hearing about it. Still another may say that he or she learns best by drawing diagrams or carrying out projects.

Observation seems to be the best test of such preference. For example, if a person is asked to do something such as name all the major cities in the United States beginning with the letter "N," for example, an indication of preference can be inferred from the method used to develop the list. Those who prefer a verbal approach will use the alphabet and say the names of the cities; visually oriented people, on the other hand, may picture a map of the U.S. and "see" the cities. Other considerations to be noted include preference for written over verbal directions, ease or difficulty in discriminating words from music when listening to a song, and a tendency to rely on writing things down or drawing pictures or diagrams to remember or make sense of things. As is true in the case of other variations in learning styles, there is no correlation between ability and sensory motor

preference.

In working with young children, a researcher named Katrina DeHirsh found that those who were taught to read using their sensory-motor preference made good progress. Those who were taught by means of an unmatched method, on the other hand, did not. Students given most of the instruction in the preferred mode and some in the other made the most progress. Thus, visual learners given sight words and auditory learners taught phonics succeeded in learning to read with little difficulty. Students whose preferred method was doing required active approaches such as touching, tracing, and writing.[1]

The question that concerns college students and their writing teachers is how this information can be useful to them. In answer, it would seem that knowing one's sensory-motor preference might be especially useful in terms of spelling, vocabulary, proofreading, and even punctuation. Students who are visually oriented should make good progress in these areas by first reading new words and concentrating on how they look and then paying attention to how they sound. Auditory learners, on the other hand, might learn best

by concentrating on hearing the words and saying them aloud before paying attention to how they look. Those whose orientation is kinesthetic, or oriented toward doing, might find writing the words while listening to how they sound most helpful. All three groups should profit from following up their initial approach by using the VATK method of improving spelling.[2] This means that they will look at the word they want to learn, say it aloud, spell it aloud, trace the word, and finally, write it. Auditory learners may find reading what they have written aloud helpful in determining what punctuation to use.

Likewise, when writing, students may find that utilizing their individual sensory-motor preference can be helpful. For example, auditory learners may be able to rely on the sound of words to choose among alternatives and may decide they are satisfied with a sentence when it "sounds right." Moreover, they can read what they have written aloud to see if it makes sense and has coherence. Visual learners may find writing descriptions easier for them than for other students and may find they can proofread by seeing what "looks right." Both visual and kinesthetic learners may

be able to draw pictures or diagrams that help them understand relationships in sentence structure such as coordination, subordination and parallelism, among other things. Taking notes will probably be helpful to both types of learners as well. Auditory learners, on the other hand, may find that listening carefully in class and taking notes later on the basis of what they remember is advantageous to them.

Thus, whatever a student's sensory-motor preference is, it is possible for that preference to be utilized effectively in learning situations. Being able to use all three approaches (visual, auditory, and kinesthetic) remains the ideal, but there is no reason not to take advantage of the natural tendency to favor one over the others. Further help can be gained by using the other methods as reinforcements.

Notes

[1]Katrina DeHirsh, in Myron Dembo, Teaching for Learning (Santa Monica, California: Goodyear Publishing Co., Inc., 1977), pp.61-62.

[2]VISUAL, AUDITORY, TACTILE, and KINESTHETIC. The procedure was introduced by Grace M. Fernald, Remedial Techniques in Basic School Subjects (New York; McGraw-Hill Book Co., Inc., 1943), pp. 33-35.

APPENDIX B 5

LEARNING STYLES IN LEVEL-OF-PROCESSING

Another dimension of learning styles which affects students very directly relates to the extent and intensity of attention paid to what is encountered. Cognitive psychologists note that people tend to fall into two distinct groups in this respect: deep-level processors and surface-level processors.

Those who are concerned with such information as underlying causes, trends, over-all structures, and significant details are called deep-level processors. They are the students who most often prefer essay tests to multiple choice or true/false questions. They also like to raise questions and speculate about what they read or hear. Deep level processors are generally not content with merely being told something such as what the McCarthy Era was and when it occurred, for example; instead, they will want to know what made it possible, why McCarthyism flourished for a time during the nineteen fifties, and whether or not the movement had any lasting effects. Such students make extensive use of their ability to see similarities and differences, make inferences, develop metaphors, and generate new

ideas.

Surface-level processors, on the other hand, do better on multiple-choice, completion, and true/false tests, as a general rule, because of their tendency to be concerned with very specific kinds of information. Who, what, when, and where are the questions they are most likely to pay attention to. Sometimes the information they choose to remember, though interesting, is superficial. Surface-level processors are able to memorize lists of names, dates, places, and such without being overly concerned with how or why these pieces of information are related. Consequently, they can more easily take what is said on an exam at face value without being led astray by other aspects of what they know about the subject. Miscellaneous events and isolated details in a novel, for example, may seem more relevant to them than motivation or character development.

Needless to say, both tendencies have advantages and disadvantages for a student, depending on what is to be learned and why. Both the surface-processor's ability to remember seemingly isolated details and the deep-processor's penchant for discerning relationships

are valuable assets for any student. Ideally, students should be able to employ either approach so that they can match their efforts to the kinds of demands being made. For essay exams and papers that require analysis or evaluation, deep-level processing is required. Hence, surface-level processors will want to learn how to discover essential aspects of a subject in order to be able to see relationships, analyze situations, and solve problems. Digging under the surface will also help them develop their ideas more fully when writing essays. Deep-level processors, on the other hand, will need to learn to be content with surface information when testing practices call for it or when the kind of information encountered does not warrant extensive attention. This effort should help them learn to take objective tests more successfully than in the past. It should also help them become more efficient students who do not spend time trying to memorize unessential information.

Both deep and surface level processors can help themselves build on the strategy they have been using and then try out the opposite strategy as they do their reading assignments and study for tests in various

classes. First, they can ask themselves what kind of information the instructor expects them to master. Directions to list, recall, enumerate, and specify call for surface processing. Conversely, instructions to evaluate, hypothesize, compare and contrast, infer or generalize demand deep level processing.[1] After determining the kind of processing required, students can use the SQ4R reading technique to help them look for the facts, ideas, trends, and other information they need to know. Next, they can look for the opposite kinds of information. If they have been asked to discover underlying causes, trends, and relationships, they can turn their attention to names, dates, places, and other very specific facts. On the other hand, if they have already isolated this specific, surface level information, they can try to discover ideas that have deeper or more extensive significance. Asking questions such as, "I wonder what if ..." "Why?" and "Could it be that ...?" will stimulate such deep level processing. Finally, when studying for tests, students can concentrate on specific details for objective tests as a rule and on underlying ideas for tests that demand explaining, relating, and analyzing information.

Students who wish to make the most of each learning experience can thus do so by first identifying and building on the tendency they have been using and then taking steps to master the opposite strategy. In doing so, they will be preparing themselves to master whatever kind of learning situation they encounter.

Notes

[1]Wilbert J. McKeachie, Learning , Cognition, and College Teaching (San Francisco: Jossey-Bass, Inc., 1982), pp. 88-90.

APPENDIX C 1

PLAYING WITH WORDS

The topic for the next essay you will write is "words." The purpose of the assignment is to help you become aware of the many properties of words - size, shape, sound, and meaning - and to encourage you to examine these aspects closely. Noting subtle differences in words which appear to be synonymous and learning to recognize what a particular word does for a sentence are two of the objectives of the assignment. A larger vocabulary and increased sensitivity to words should also result.

You may choose to investigate one type of words such as "uplifting" words or "put-down" words or you may wish to contrast groups of words such as "happy" ones and "sad" ones or "loud" words and "quiet" ones. Or you may want to consider how you react to certain words compared with how people in general react to those same words. An analysis of word choice in one of Martin Luther King, Jr.'s speeches would prove valuable, as would taking a close look at John F. Kennedy's diction in his "Inaugural Address."

Whatever you choose to write about, concentrate on being very specific. Don't merely list all kinds of words. Instead, make comments on some of the words to illustrate their meaning or effect. Your methods of structuring and developing your essay will depend largely on the topic you choose. For example, if you choose to talk about the humor to be found in idioms, you may wish to express dismay at the teacher who tells a student not to "beat around the bush" when there are obviously no bushes in the classroom. Or you may ask naively how anyone can "put his foot in his mouth." If you decide to examine effective diction in an essay, song, or poem, you may want to explain why each word is the better choice, or you may wish to demonstrate this by showing what would happen to representative

sentences if weaker or more general words were substituted. The possibilities for topics are almost endless.

Some categories of words that come to mind, in addition to the ones already suggested, are as follows:

euphemisms cliches foreign words now part of English encouraging or discouraging words evasive words nostalgic ones words that evoke fear calming words luxury words guilt words sophisticated words favorites space-age words play words work words mouth-watering words lazy words action words old-fashioned words peace words names (old, new, popular, odd, humorous) the words of a specialized vocabulary inspiring or comforting words celebration words nothing words pleasant sounding words words that relate to a course you are taking

APPENDIX C 2

DESCRIPTION-PREWRITING ASSIGNMENT

The purpose of this assignment is to help you become more aware of details than you have probably been in the past. In preparation for writing a descriptive paper, you are to follow the directions given below.

1. Sit still with your eyes closed for five minutes. During this time, concentrate on listening to what is going on around you. After the time is up, make a list of the sounds you heard. Once you have listed the sounds, go back to the beginning of your list and write a descriptive word or phrase for each sound.

Example:

someone laughing - loudly, nervously, happily
telephone ringing - insistently, loudly
washing machine - spinning, on rinse cycle
music on the radio - blaring, soothing

2. Next, make a list of sounds you like. Again, try to be specific by using a word or phrase to describe each sound.

Example:

rain on the roof in summer - gentle, lulling
music on a bright, sunny day - lively, happy
waves hitting the shore - banging, crashing,
small children - giggling, singing, laughing

3. Now choose an object or objects and write down words that describe how each feels. Next to each word, make a comparison with something else that has a similar feel.

Example:

rough texture - like unsanded wood
sticky consistency - like pancake syrup
scratchy - like a piece of heavy wool
smooth - like silk or velvet

4. Sit down with a magazine or book or other item in front of you. Write down all the pertinent information about how it looks. Consider size, shape, texture, color, pictures, decorations, writing, or anything else that is noticeable. Whenever possible, add descriptive words or phrases.

Example:

8 1/2 inch rectangle
red background - bright - like sour cherries
title (TIME) across top - white letters - 2 inches high
picture of sailboat going under bridge - surrounded by other sailboats

5. Think of some things that you like to taste. List them and then put an appropriate adjective next to each item. Do the same thing with tastes you dislike.

Example:

brownies - chewy, chocolate
coffee ice cream - creamy, rich, smooth

spinich - stringy, strong
lima beans - like paste, flat, tasteless

6. Now think of things that can be smelled. First, list things you find pleasant to smell; then list things which are unpleasant or which signal danger. Add an adjective, if possible.

Example:

freshly baked bread - inviting
a rose - sweet

plastic burning - acrid
paint stripper - pungent

APPENDIX C 3

SUGGESTIONS FOR IMPROVING SPELLING

1. Rely on a good dictionary.

2. Divide the word into separate parts.

3. Learn bases and roots of words and make associations among words. Note changes in affixes.

4. Take a good diagnostic test. See Spelling 1500 in the Writing Laboratory.

5. Use phonics to help. See handout or go to the Reading Laboratory.

6. Be certain you are pronouncing the word correctly before you try to spell it.

7. Use memory tricks. See suggestions in Steps in Composition and 111 Words in the Writing Lab.

8. Learn the rules for spelling. See Writing Lab Handout 2.81 for the four most useful rules.

9. Use word games and puzzles to make yourself familiar with manipulating words.

10. Make a list of the most common spelling errors you make and consult it when proofreading your papers.

11. Use the VATK approach.[1]

    V - visual - look at the word
    A - auditory - say the word
    A - auditory - spell the word
    T - tactile - trace the word
    K - kinesthetic - write the word

[1]Grace M. Fernald, Remedial Techniques in Basic School Subjects (New York: McGraw-Hill Book Co., Inc., 1943), pp. 33-35.

APPENDIX C 4

SUGGESTIONS FOR IMPROVING VOCABULARY

1. Use a dictionary. Learn the exact meaning of a word. Note how the word may be used as different parts of speech.
   Example: advance
   verb - to go forward; to improve
   noun - a loan; prepayment
   adjective - early; beforehand

2. Examine context in which the word is used.
   Example:
   Jim hopes to advance rapidly in his new job.
   Sue often asks her parents for an advance on her allowance.
   Banks must give advance warning before they foreclose on a mortgage.

3. Learn the major Latin and Greek roots and note how words are built on them.
   Examples: chron - time - chronic; chronology; chronometer; chronological
   metr - meter - measure; metronome; metric; odometer, pedometer

4. Learn the commonly used prefixes and suffixes.
   Examples: bi - two - bilateral; bicycle bicameral; bipolar; biplane
   hood - state of - adulthood; statehood; nationhood

5. Become aware of other words devrived from a base word.
   Examples: absorb - absorbent - absorption
   venture - venturesome - adventure
   adventurous - adventurer

6. Learn synonyms, antonyms, and homonyms.
   Examples: Happy - synonyms - glad, joyful;
   antonyms - sad, unhappy, woeful;
   homonyms (homophones) - pair, pare, pear; too, to, two; site, cite, sight

7. Learn words in groups rather than individually.
   Examples: ology - study of - biology,
   geology, psychology, numerology, psychology
   path - feeling, suffering, disease - sympathy,
   apathy, empathy, pathos, pathology, pathogenic

8. Become aware of words derived from other languages.
   Examples:
   French: cuisine, cinema, blouse, theater
   Italian: solo, piano, opera, stanza
   Arabic - algebra, safari, gazelle
   African - banjo, impala, marimba
   Spanish - patio, veranda, rodeo, adobe
   German - kindergarten, muffin, frankfurter

9. Learn words of specialized vocabularies.
   Begin with those related to the classes you
   are taking now.
   Examples:
   law - de facto, de jure, habeas corpus
   art - aesthetics, symmetry, shading
   science - atoms, molecules, neutrons
   music - pianissimo, forte, solo, alto

10. Note words derived from proper nouns.
    Examples:
    boycott, herculean, machiavellian
    Jeffersonian, Reagonomics

11. Note level of usage. Is a word formal or
    informal? Is it concrete or abstract?
    Is it in general use or technical?
    Is it slang, colloquial, Obsolete?
    Examples:
    concrete - ten pounds, blue
    abstract - heavy, pretty
    formal - numerous, difficult
    informal - a lot, hard
    general use - heart attact
    technical - coronary infarction

12. Use a thesarus. Learn the subtle differences
    in meaning among words which appear to be
    synonyms.

Examples:
brittle, breakable, fragile, delicate, flimsy

13. Use word games, puzzles, word-searches, slides, filmstrips, and books designed for vocabulary improvement.

14. Experiment with several or all of the approaches and then rely on the one that works best for you. Remember to take your sensory-motor preference into account. Begin with it and the use the other approaches.
Examples:
If you are primarily an auditory learner, listen carefully to others when they speak. Also say words that you want to remember, and experiment with using vocabulary tapes.

If you are primarily a visual learner, depend on what you read as a source of new words. You might also find vocabulary books, lists, slides, and filmstrips valuable. Look carefully at each word and at the ways it can be used.

If you are a kinesthetic learner, that is, someone who learns best by doing, depend on writing or typing or tracing the words you want to learn in addition to looking at and saying them.

APPENDIX C 5

PROCEDURE FOR ANSWERING ESSAY QUESTIONS

EXPLANATION

I. Read the question carefully.
   A. Determine what information the question demands as essential.
   B. Decide what information is secondary but significant.
   C. Look for clues to organizing the answer in the question.

II. Organize the answer on scratch paper.
   A. Write a topic sentence which embodies the most important aspects of the answer.
   B. Jot down ideas, dates, places, names, etc. to be used in developing and supporting the answer.

III. Write the answer clearly, concisely, and in good English.
   A. Answer the question directly, using the topic sentence worked out above.
   B. Develop the answer more fully and give supplementary information.
   C. If time permits, sum up the main points of the answer again.

EXAMPLE

Question: Define the term SQ4R and explain what makes it an effective technique.

I. Reading the question carefully.
   A. The question demands a definition and an explanation.
   B. What each letter or number stands for is also important.
   C. The question indicates a two part answer, the first part being a definition and the second part an explanation that emphasizes the effectiveness of the technique.

II. Organizing the answer on scratch paper.
   A. SQ4R is a reading technique (the definition) which includes six steps to be taken

to ensure effective reading (explanation) through reliance on a variety of memory skills.

B. Skim, question, read, write, recite, review.
Active. See, hear, feel, and think.
Efficient as well as effective.

III. Sample answer

SQ4R is a reading technique which includes six steps to be taken to ensure effective reading through reliance on a variety of memory skills. The steps are to skim, to question, to read, to write, to recite, and to review. Advocates of this approach to reading maintain that it improves a person's ability to read intelligently by requiring him to employ a number of skills rather than simply reading words and trying to memorize a few pertinent facts. Skimming encourages greater speed in reading and it also provides a valuable overview of the topic under discussion. Questioning what has been read actively engages the mind, thus preventing the practice of passively absorbing words. Reading more carefully, writing, and reciting further encourage active participation by employing not only the eyes, but also the ears and muscles of the hand. Reviewing recalls to the mind what has been presented to it. Thus the SQ4R method promotes greater understanding and retention of what is read by employing visual, auditory, and kinesthetic memory skills.

(This exercise was developed by Miriam Fabien for the Writing Laboratory at Henery Ford Community College and is used by students at the college.)

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